



Bremerton's 2018 Capital Projects

January 9, 2018

Capital Project Overview



Water System

System features:

- Casad Dam – “Gravity-Arch”, 1.4B Gallons (surface water supply)
- 12 Water Production Wells
- Disinfection - UV & Chlorine
- Corrosion control
- 18 Reservoirs
- 12 Pump Stations
- 300 Miles of Watermains



Water Projects

\$5.8M capital program:

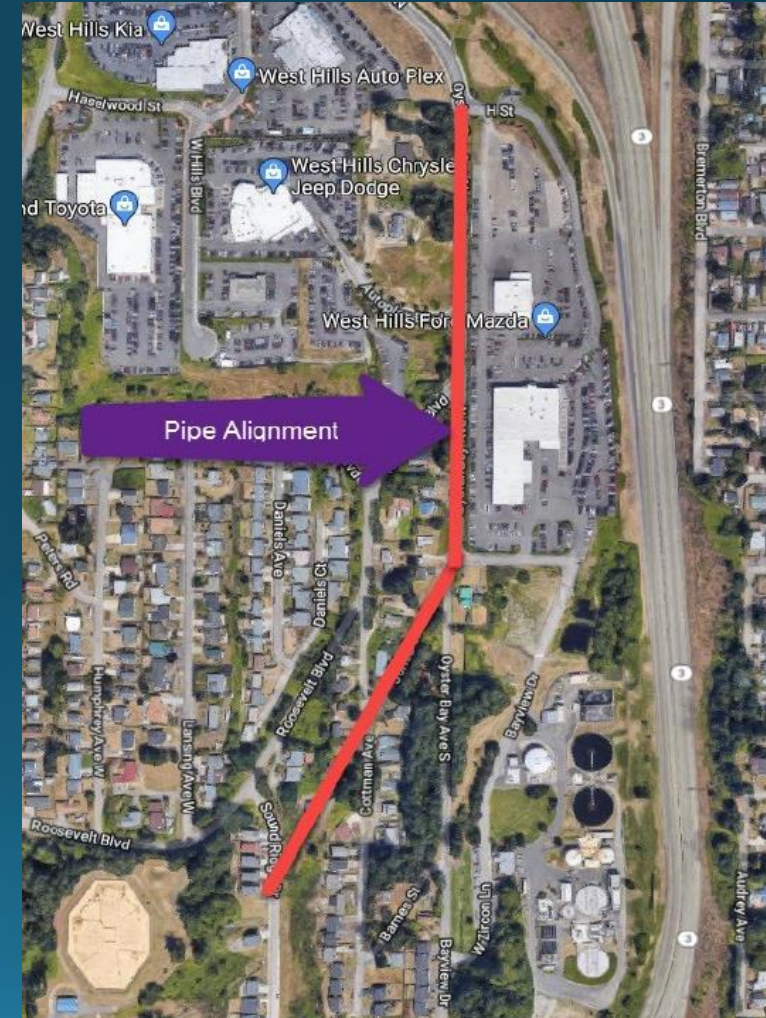
- Annual programs – replace mains, meters, valves, etc.,
- New forestry storage building,
- Site improvements at Reservoir 4,
- 24-inch TM at Reservoir 4
- Reservoir 17/20 Exterior Coating
- Distribution Mains:
 - 9th Street between Veneta and High
 - Extension to Aero Mobile Estates on SR₃



24-inch Water Transmission Main

\$2.4M construction:

- Replace an aging steel transmission main,
- Construct April through October,
- Full width pavement restoration on several streets, half lane on Oyster Bay Ave South,
- Single lane – alternating traffic



Wastewater System

System features:

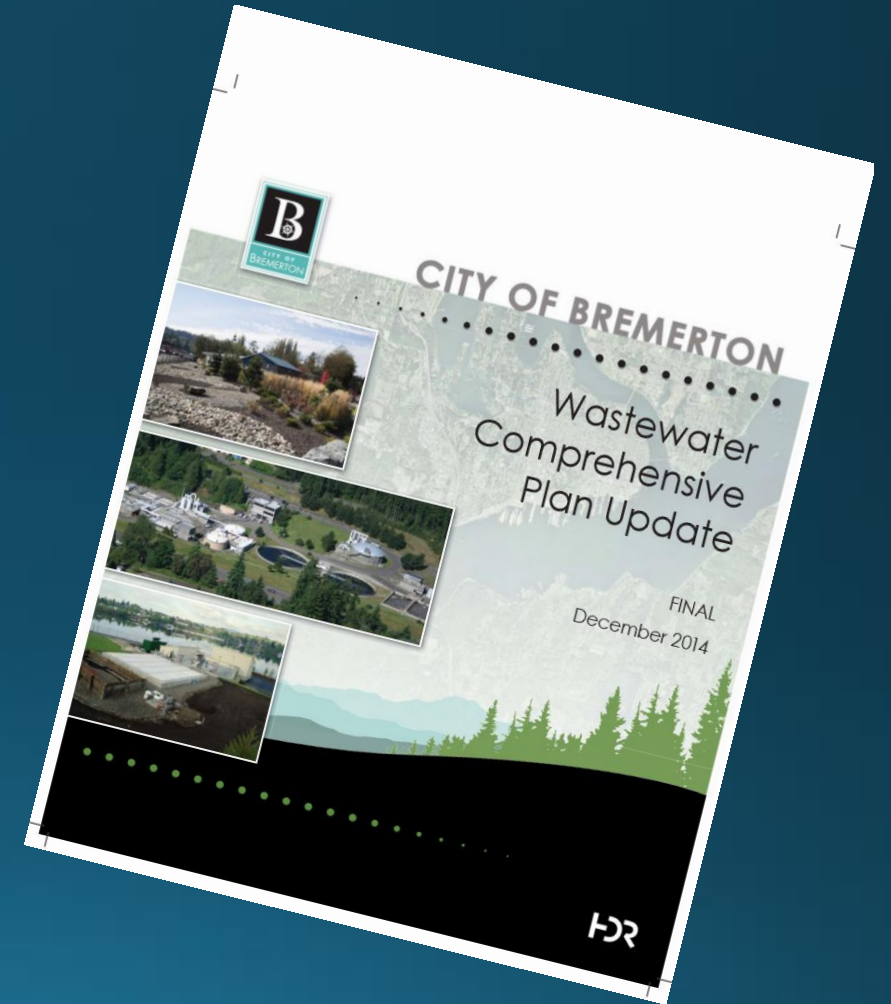
- 32.5 MGD WWTP
- 20 MGD CSO Treatment Plant
- 39 Pump Stations
- 191 Grinder Pump Stations
- 300-miles of Gravity and Pressure Mains



Wastewater Projects

\$9.7M capital program:

- Annual programs – replace mains, CIPP, equipment, instrumentation, etc.,
- Other major improvements – pump replacement, structural repair, odor control eqpt, other facility eqpt, etc.,
- WWTP Interceptor Upgrade
- Pump Station CW₄ Upgrade
- Eastside Treatment Plant Outfall
- Eastside Treatment Plant UV Upgrade
- Designs; OB₂ – OB₁ Beach Sewer, PSIC ULID



WWTP Interceptor Upgrade

\$2.5M construction:

- Replaces undersized lines and a line under a critical WWTP facility
- Challenging work at a constrained site (Westside WWTP)
- Construction April through September
- Will replace 10" and 16" pipe with a 24" for capacity and to eliminate a pipe under an aeration basin



Pump Station CW₄ Upgrade

\$1.4M construction:

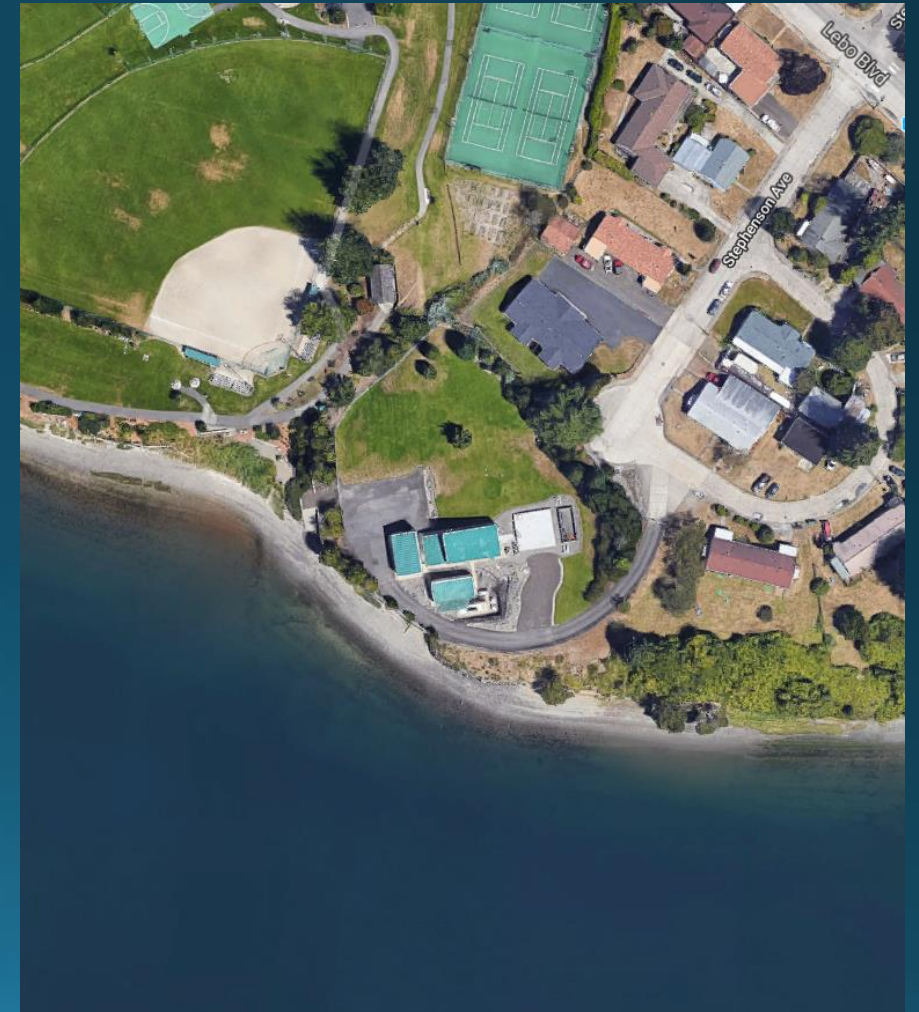
- Project will divert flow from a beach main with 4 tributary overflow sites; project is required for continued CSO reduction compliance,
- Improves access, upgrades equipment and provides emergency power,
- Construct July through December



Eastside Treatment Plant Outfall

\$1.6M construction:

- Existing undersized pipe partially plugged, several diffusers inoperable which limits treatment capacity,
- Construct June through December,
- Value engineered to reduce construction under walls and maintain much of the existing line,
- In-water work requires extensive permitting, construction during fish window



Stormwater System

System features:

- 114-miles of storm pipe
- 13-miles of storm ditch lines
- 3,750 catch basins
- 35 stormwater treatment and flow control facilities, including an LID Demonstration Project (Lillian and James Walker Park)



Stormwater System

\$2.1m capital program:

- Annual programs – replace mains and culverts
- Marine Drive & Kitsap Way Modular Wetlands
- \$1.5M in additional design pending state budget – East 11th, Ostrich Creek (Kitsap Way, Price Road, Brentwood Drive); Pine Road (Eagle Ave, Lebo SW outfall)



Modular Wetlands

\$675K construction:

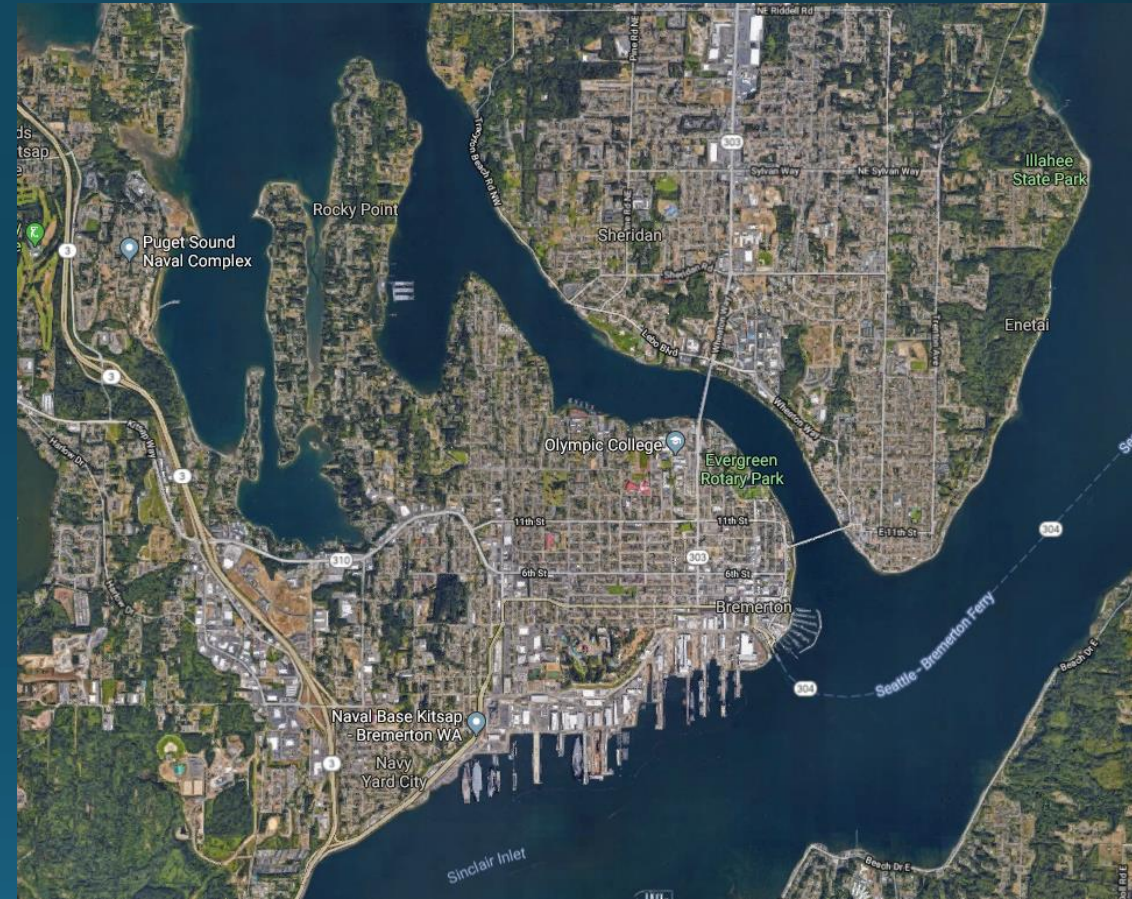
- Install 3 modular wetlands (stormwater treatment) on Marine Drive, and 1 on Kitsap Way.
- Construction summer, 2018,
- Oyster and Ostrich Bays are impaired water bodies per Ecology. These treatment facilities move to improve water quality to standards



Street System

System features:

- 192 lane-miles residential (60%)
- 41 lane-mi state routes (14%)
- 127 lane-mi arterials/collectors (26%)
- Assets include:
 - Pavement
 - Sidewalks
 - 41 traffic signals
 - Illumination – 1,650 PSE, 900 City lights
 - 39,000 signs
 - 8,500-ft Guardrail



Residential Streets

New program for 2018, \$1.33M:

- Pavement/sidewalk condition assessment,
- Chip seal with Mason County
- Equipment (mini excavator, pickup, VMS board)
- Safety improvements (illumination, guardrail, etc.,)
- Sidewalks; ADA corrections & abatement
- Capital projects (\$480K)



Residential Street Chip Seal

\$250K construction:

- Need to concentrate improvements in one area,
- Streets proposed for 2018 not yet determined,
- Construction late summer/coordinate with Mason County,
- Efficient and cost effective – once prep was completed, Mason Co. chip sealed 5.2 lane-miles in one day last year!



Sidewalks

2 programs; abatement/cost-share (\$70K; \$20K res, \$50K other) & construction (\$90K; \$40K res, \$50K other):

- Cost share agreements; generally 50% residential and 25% other, up to 100% for low income to correct deficiencies,
- Construction (mostly curb ramps) to be coordinated with the ADA committee,
- IDIQ contract proposed



Residential Street - Construction

\$480K construction:

- Defining scope & identifying streets now; propose to overlay street in poor condition (no failed streets in 2018),
- Minimal sidewalk work proposed for 2018 (trip hazards & required ramps only),
- Construction mid/late summer,
- Maximize use of City labor and equipment
- Pavement investigation in 2018 will inform future work



Arterial and Collector Streets

\$3M capital program:

- New signal cabinets & flashing yellows,
- Pavement/sidewalk condition assessment,
- Safety improvements (illumination, guardrail, etc.,)
- Sidewalks; ADA corrections & abatement
- Illumination on traffic signals
- SR304 partnership with WSDOT
- Belfair Valley/Tracyton Beach Roads
- Design – Kitsap Lake/Harlow SRTS



Arterial/Collector – HFP & Guard Rail

\$1.5M construction:

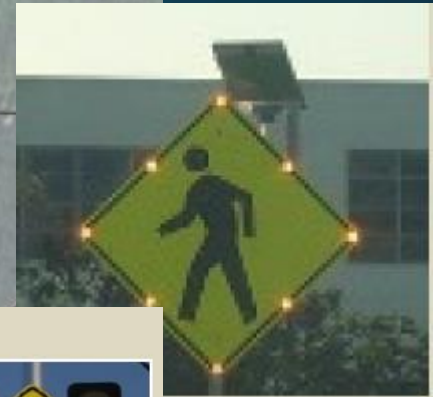
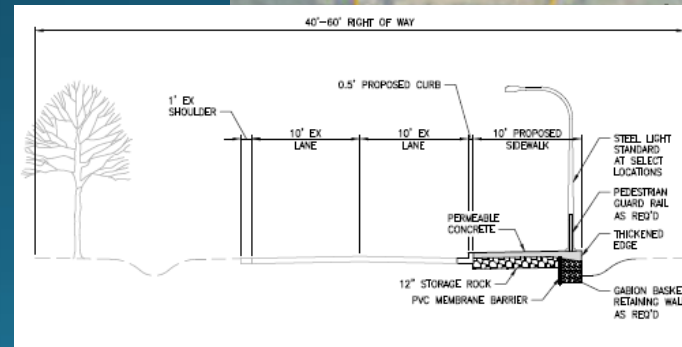
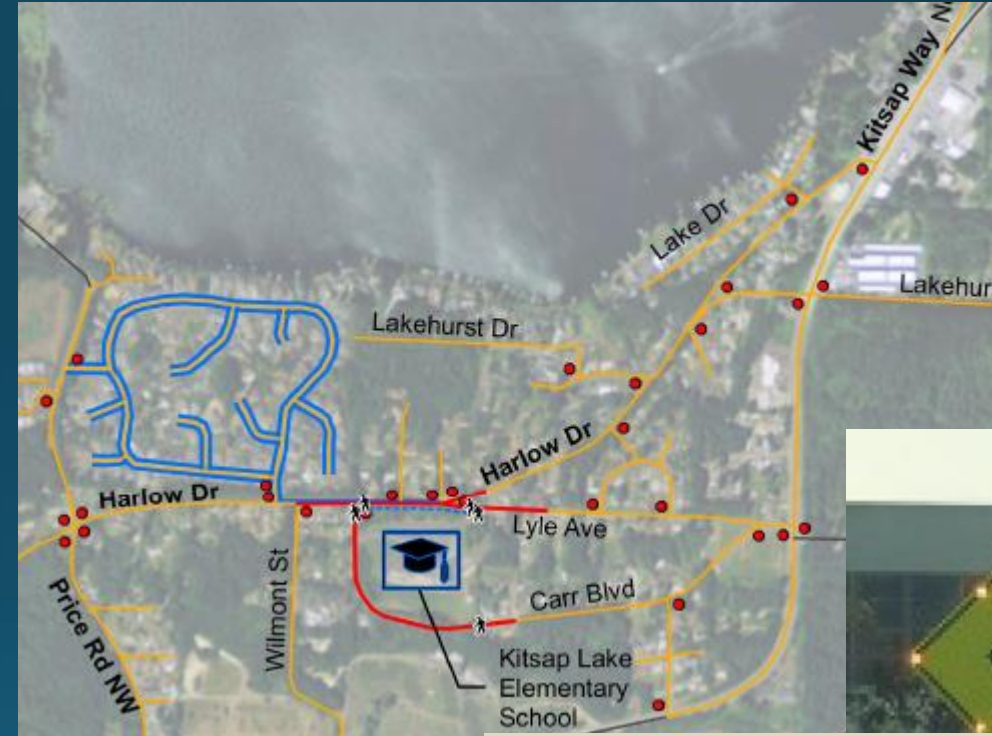
- Installs high friction pavement and guardrail on Belfair Valley and Tracyton Beach Roads
- Highway/Innovative Safety Funds
- Includes dig-outs and patching where necessary. Pavement “cure” time required prior to HFP installation
- Delay to 2018 resulted in \$400K project savings



Arterial/Collector – Kitsap/Harlow

\$1.8M design/construction:

- 2018 design, 2019 construction
- Shared use pathway on one-side
- Illumination at intersections
- Enhanced crossing at Lyle and Carr
- Sidewalk construction on School property
- Give us your comments!!



Questions

